

DATE: February 25, 1991
TO: Sy Levine
FROM: Joe Kotas *CK-JK*
SUBJECT: LTV Coke Plant
Drive by inspection
Of February 1, 1991
031 600 AMC

EPA Region 5 Records Ctr.



307754

During a general reconnoitering of the southeast side skyline a plume of black smoke was discovered emanating from a tall stack on the horizon. The source was located and determined to be LTV Steel's Coke Plant. An outside surveillance was conducted about 1,000 yards southeast of the coke battery. Black smoke of 100% opacity (see attached) was observed coming from what was later determined to be the boiler house. The duration of the excursion was at least ten minutes. Another smoke stack (venting the coke oven) was observed discharging white smoke of up to 25% opacity. A yellow haze of coke-oven gas was observed constantly rising from the battery. Only slight odors were detected most probably owing to the fact that wind was calm and the plumes were rising rapidly to a high ceiling.

At one point a large cloud of black smoke was released in what looked like that from a fire coming from ground level. The cloud rose and slowly dissipated above the houses near the Coke plant.

An unannounced inspection was then conducted. Bob Hennessey, Plant Manager, and Richard Myers, Environmental Engineer, escorted the author.

Mr. Hennessey stated that an excursion had taken place caused by events in the boiler house. Natural gas had come on automatically caused by a pressure drop in coke oven gas which normally supplies the burners. Since natural gas requires more oxygen than coke oven gas it took some time to add oxygen and stabilize the system, more so because one of the booster fans went out of service. The 100% opacity black smoke was said to be caused by this incomplete combustion of natural gas for a duration of ten minutes.

Mr. Hennessey stated that he did not know what caused the large ground level cloud of black smoke nor acknowledged that he knew such an event occurred.

Emissions from the stack of the coke oven had changed from white smoke to black smoke. Mr. Hennessey stated this was due to holes or cracks in the walls of the combustion chamber.

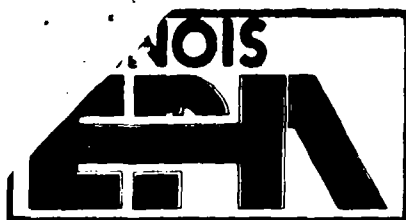
LTV Coke Plant
February 25, 1991
Page 2

The coke battery was then observed in operation. Coke oven gas was observed leaking from doors #5, 9, 11, 13, 29, 31, 33, 37 and 39 on the charge side and doors #7, 9, 29, 31, 33, 34, 36, 37, 39, 41, 43, 56, 58 and 60 on the push side. Several of these were leaking at very significant levels (40% opacity). The reason given for these leaks was that the events of the breakdown blew the seals on the doors.

On February 4, Mike Thomas from LTV contacted C. Krzymowski of the Agency to formally report the incident and to state that an explanation of the event was being prepared in written form.

On February 11, the above mentioned response was received (see attached) and deemed adequate to explain the emissions observed. The maintenance schedule will be monitored.

JK:bh:5704B



Environmental Protection Agency

2200 Churchill Road, Springfield, Illinois 62706

VISIBLE EMISSION RECORDING FORM

Company Name <i>LTV Steel</i>		Company ID Number		Observation Date <i>2/1/91</i>																																																																																																																																																																																																																																																																																																																							
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		Comments <i>Ceased readings when black cloud of smoke began rising from ground level.</i>																																																																																																																																																																																																																																																																																																																									
Observer's Signature		Date <i>2/1/91</i>																																																																																																																																																																																																																																																																																																																									

TO BE ATTACHED TO INSPECTION MEMORANDUMS - **FOR INTERNAL AGENCY USE ONLY!**



Illinois Environmental Protection Agency • 2200 Churchill Road, Springfield, IL 62706

Date: March 5, 1991 Date of Inspection: February 20, 1991
 To: M. Zamco Last Ins. Date: _____
 From: Joe Kotas I.D.#: 031 600 AMC R/D: 105
 Facility: LTV Steel Company

Address: 11600 S. Burley Avenue, Chicago, Illinois 60617

Contact/Title: Mike Thomas/Env. Eng.

Phone: (312)933-4190

PRE-INVESTIGATION STATUS:

<input type="checkbox"/> Workplan	<input type="checkbox"/> (A) Task Force	<input type="checkbox"/> (R) Random/Non-Traditional
<input type="checkbox"/> Quarterly Report	<input type="checkbox"/> (B) On Program	<input type="checkbox"/> (S) HC Chicago
<input type="checkbox"/> MIR	<input type="checkbox"/> (C) Violator	<input type="checkbox"/> (T) TSP Chicago
<input checked="" type="checkbox"/> Other <i>Drive By</i>	<input type="checkbox"/> (D) NESHAPS	<input type="checkbox"/> (V) B Facility
	<input type="checkbox"/> (F) NSPS	<input type="checkbox"/> (W) Multi-Media Problems
	<input type="checkbox"/> (I) A-2	<input type="checkbox"/> (X) Service Station
	<input type="checkbox"/> (J) Special Request	<input checked="" type="checkbox"/> (Y) Drive By
	<input type="checkbox"/> (M) Asbestos Demolition	<input type="checkbox"/> (Z) Petrochemical Plants

RECEIVED

MAR 15 1991

ENVIRONMENTAL PROTECTION AGENCY
 DIVISION OF AIR POLLUTION CONTROL
 STATE OF ILLINOIS

INSPECTION FINDINGS

<input type="checkbox"/> Emission Violation	<input type="checkbox"/> CIL	<input type="checkbox"/> EIS Checked
<input type="checkbox"/> Permit Violation	<input type="checkbox"/> To MIR	<input type="checkbox"/> EIS Coded
<input type="checkbox"/> Permit Condition	<input type="checkbox"/> To Quarterly Report	<input checked="" type="checkbox"/> Malfunction
<input checked="" type="checkbox"/> Violation		<input type="checkbox"/> Copy to Facility
<input checked="" type="checkbox"/> NO VIOLATION	<input type="checkbox"/> Multi-Media Issue Possible	<input type="checkbox"/> Frequency Change
<input type="checkbox"/> Flag File	<input type="checkbox"/> Land <input type="checkbox"/> Noise <input type="checkbox"/> Water	

IL 532-1244
 APC 421 (Rev. 01/91)

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